

GENERAL NOTES

A FOX ASSOCIATING WITH MOUNTAIN SHEEP ON THE KENAI PENINSULA, ALASKA

In the fall of 1912, Morris L. Parrish and Wilson Potter, both well known sportsmen in Philadelphia, made a hunting trip to the Kenai Peninsula, Alaska. In a sumptuous folio volume Mr. Parrish privately published his diary of this trip and illustrated it with two hundred and nine photographs. The title is: "Hunting on The Kenai Peninsula A Daily Diary Illustrated with Some Photographs By Morris L. Parrish, Philadelphia, Pa.; 1913. Privately Printed." This is an extremely interesting record of the trip and the game. Since but few copies were issued and therefore the observations recorded will never be easily available to naturalists, it seems worth while to record in the Journal of Mammalogy an unusual sight witnessed by Mr. Parrish and his guide, H. E. Revell, who was indicated as the "Colonel."

In the mountains about the divide between Tustamena Lake and the Kenai River, Mr. Parrish on the date mentioned killed a ram. The following quotation follows this event: "September 18, 1912. . . . We went right on thinking there might be some more sheep in a gulch further down, and here we saw what the Colonel said was a most remarkable and un-heard-of sight. Three rams were on the side of a hill, walking along in single file, and a cross fox was walking with them, he jumping up and biting their faces in play, and they butting him gently along in front. When they lay down he lay down too, and they were evidently travelling together, and the best of friends. We watched them for fully 15 minutes through the glasses at about 300 yards. There was another ridge, some 200 yards further on, and we crawled along this, but when we reached it the rams had disappeared. We saw the fox some distance off, but could not find the sheep again. . . ."—CHARLES SHELDON, *Washington, D. C.*

A WOLVERINE IN A TREE

In connection with the recent notes by Dr. George Bird Grinnell on the ability of the wolverine to climb trees I would like to call attention to a photograph of one in a tree which was published in the National Geographic Magazine, vol. 29, May, 1908, p. 353. The picture was taken in October, 1907, in Big Horn County, Wyoming, by Alan D. Wilson, who says: "The photo is I think almost unique for they are not only rare, but generally prefer to go over the rimrock than tree when chased."—N. A. WOOD, *Museum of Zoology, University of Michigan, Ann Arbor, Mich.*

A MONGOOSE IN KENTUCKY

On December 20, 1920, a mammal received for identification by the United States National Museum, during the absence of Mr. Gerrit S. Miller, Jr., curator of mammals, was referred to me for determination. The specimen consisted of a cased skin, with the feet, tail, and anterior portion of the snout attached, including most of the maxillary and mandibular teeth. It was an adult mongoose, *Herpestes griseus* E. Geoffroy. The animal had been trapped by Mr. Thomas May, November 18, 1920, in a field just on the edge of the village of Midway,

Woodford County, Kentucky. Mr. May noticed that something had been running under a haystack, and, thinking it might be a mink, he set a trap under the stack and caught the mongoose,—an animal entirely strange to him and to other people of the vicinity. No record of how the mongoose reached the region can be traced.

This animal, *Herpestes griseus*, a native of India, is the same species which has been introduced into Cuba, Porto Rico, and several other places, for the destruction of noxious rodents, but it has become a serious pest on account of its destruction of poultry and birds. The capture of a single animal in the United States should not in itself unnecessarily alarm us, but it should stimulate us to be doubly on our guard. In spite of laws, ably administered and rigidly enforced, against importation or shipment of the mongoose in this country there is always a possibility that the animal might become established. Should such ever be the case it would spell the doom of all ground-nesting birds throughout a great part of the United States. Everybody interested in conservation of native wild-life should be able to recognize the mongoose and should report any occurrence of the animal in the country at once to the U. S. Biological Survey. The animal is really quite unlike any native North American species and is easily identified. It is a carnivore about the size of the mink and of similar proportions. The tail, however is rather longer than that of the mink, and tends to taper toward the tip. The animal is furred rather scantily, particularly ventrally, with a coarse, hispid hair. Its general tone of color is yellowish gray, distinctly flecked or grizzled with brownish black and whitish. This color effect is produced by an underfur of clay color intermixed with the longer guard hairs each one of which is banded alternately with fuscous-black and buffy white, the fuscous-black bands being the longer.—HARTLEY H. T. JACKSON, *U. S. Biological Survey, Washington, D. C.*

PRIBILOF FUR SEAL ON THE OREGON COAST

On February 1, 1921, an immature male Pribilof fur seal (*Callorhinus alascanus* Jordan and Clark) in a badly emaciated condition came ashore on the ocean beach about a mile north of the bar at Netarts Bay, Tillamook County, Oregon. When first seen by a local resident the seal was high up on the dry sand, above normal high tide, and was "quite active." About two hours later, when Mr. Clarence Edner of Netarts went to look for it, he found it lying dead in the wet sand just above the breakers. Mr. Edner thinks that after the animal was first seen it made an attempt to return to the sea but died before reaching the water.

So far as I am aware, this is the only authentic record in recent years of the occurrence of the Pribilof fur seal on the Oregon coast.—STANLEY G. JEWETT, *Portland, Oregon.*

ELEPHANT SEALS OFF THE COAST OF CALIFORNIA

In the May number of the *Journal of Mammalogy*, page 112, there appeared an article by A. W. Anthony recording the appearance of elephant seals off the southwest coast of California. Several years ago Capt. Chas. Davis captured several young elephant seals on Guadalupe Island and brought them, alive, to

Venice, California, where they were exhibited in a tank of water for a year or two. The tank was on a pier extending out into the ocean.

A year or two ago a heavy storm demolished that portion of the pier where the seals were exhibited and they escaped into the ocean. It is quite probable that these animals, or some of them at least, are still living in the waters off southwestern California. No elephant seals have been heard of in this vicinity for many years. The nearest rookery is Guadalupe Island and it seems more natural to believe that the specimens recently reported are escaped animals rather than ones that have left the herd at Guadalupe and wandered north.—JOHN ROWLEY, *Los Angeles Museum, Los Angeles, California.*

MUSKRATS IN CENTRAL EUROPE

In 1906 Princess Colloredo-Mannsfeld imported four pairs of muskrats (*Fiber zibethicus*) from America and turned them loose in Dobrisch, an estate southwest of Prague, Bohemia. These animals subsequently increased in such numbers that at present they have spread all over Bohemia, into Upper and Lower Austria and Moravia and also into Bavaria and Saxony, following the water-courses.

The muskrats have shown themselves to be very injurious, as they construct their burrows in the dams and embankments of the rivers and ponds, and thus, by undermining the banks they endanger the whole system of waterways, subjecting the surrounding fields to the danger of floods.

Very strict regulations have been issued, therefore, in all the countries invaded by the muskrat, to curtail its further spread, and it is generally forbidden under heavy fines to maintain the animals, breed them, or turn them loose. All persons, directly or indirectly interested, are required to report every appearance of muskrats to the authorities. Owing to his secretive habits of life, the muskrat often succeeds in remaining unnoticed for a considerable period in his new haunts.

The muskrat is inclined to be nocturnal, but in districts where he feels himself unnoticed he is to be seen during the day also. In general it has been observed that during overcast weather and dark nights the rats do not appear for days at a time, and rarely swim about when it is windy. The muskrat builds his summer-dwelling in the high banks or dams of water courses and ponds. This consists of a burrow from which a carefully concealed exit leads to the bank, often 10 to 15 feet away; other runways lead under the water level and to the bottom of the water. Piles of earth which have been removed from the ponds are also used.

The animals established in Europe breed twice or three times a year and produce 6 or 8 young at a time. Thus an annual family of 18 to 24 young may be expected which sufficiently explains the phenomenal spreading of the species.

In winter the muskrats often abandon their burrows and build so called "winter-castles" in shallow places in the ponds. These consist of heaps of bitten off reeds, rushes or sedges, more or less mixed with mud. They have a diameter of 3 to 6 feet, project 2 to 3 feet above water level, and have no visible exits. These quarters contain a dry sleeping-place above water level and, connected with it, a burrow extending into the water.

As to the damage caused by the muskrat to fish and game the opinions vary greatly, some saying it is inappreciable, others that it is very great. As a matter of fact our animal feeds chiefly upon plants; he is even said to enter fields of grain and cut down the stalks. If plants are sufficiently plentiful he sticks to them, but if not he robs the nests of wild water-birds, even hen-yards and store houses. At any rate it is not surprising that when he has chosen a well stocked fish-pond for his headquarters he should take to catching and eating fish. In Bohemia, the centre of activity of the muskrat in Europe, there is a very extensive fisheries industry, based upon fish which are maintained in more or less artificial ponds.

I shall refrain from discussing the natural history, the general appearance or other peculiarities of the introduced muskrat, as those of his American ancestor are well known. I only intended showing how some imported animals will thrive, if adapted to their new surroundings.—THEODOR G. AHRENS, *Berlin, Germany*.

MALFORMED HIND FOOT OF THE COMMON HOUSE MOUSE (*MUS MUSCULUS*)

I recently captured a house mouse possessing a hind foot with six toes, instead of the usual five. The toe representing the thumb is a trifle undersize, while the superfluous member is overgrown, and protrudes awkwardly at a sharp angle from the foot. The foot itself and the remaining toes are in every way normal. I trapped this animal near Guelph on March 29, 1921, in the heart of a low, wet, and dense swamp of cedars, balsam, aspen, willow, etc. The ground in many places was carpeted with moss a half-inch or more in thickness—just such a place as one might be certain of taking the red-backed vole if it were farther north. I was somewhat surprised to find a house mouse here, having never before trapped this domestic pest under conditions of this kind, and so far removed from buildings. Doubtless it indulges occasionally in protracted wanderings, bringing up finally in some barn or house.—J. DEWEY SOPER, *Guelph, Ontario*.

NOTES ON *NAPEOZAPUS*

This rare mouse has long been a subject of thought to me, and in early August of 1920 I made a trip of some hundreds of miles for the express purpose of seeking it, but failed. What was my surprise, then, to find two in my traps on the morning of August 23, at Canoe Lake, Algonquin Park, Ontario. Subsequent nights yielded one, three and one, and then a blank, as though the supply were exhausted. Two of these fell to the traps of Stuart Thompson, of Toronto, but all the success was in a very limited area. I had been expecting to find them in deep, dark evergreens, near water, but these were captured in a small clump of alder and willow on the bank of a beaver stream. Careful examination had showed what seemed to be a runway on the dead leaves covering the ground, and the trap set on that runway yielded a mouse every night until the last, when trap and all vanished. A mink, perhaps. Further search revealed a little pile of the scales of alder fruit, and a trap set at that place by Mr. Thompson caught a mouse the next night, and near it was an alder cone partly eaten. Whether the animal is partially arboreal—totally unexpected, if true—could only be

guessed at, as we had only the one piece of evidence, but numerous traps spread out in other places than this alder thicket with one exception, yielded nothing. This was across the stream, perhaps 80 feet away, where the beaver had worn a path through the sod in climbing up a steep bank. About 5 feet up the bare path ceased, and under the overhanging sod were two mouse holes. One was right in the center of the path and there was no possible chance but that the beaver would spring any trap set there before the mouse got into it, but the other hole was at one side, and there I made a little shelf with my knife and set the trap which caught a *Napæozapus* the next morning. Further trapping at this point was fruitless, but the holes looked good, even when we left. In view of this little insight into the habits of this species I should feel rather confident of trapping it in alder thickets along beaver streams when the fruit of the alders was ready to eat.

The beautiful colors of these mice faded rapidly, and when the last one was caught Mr. F. W. Fraser kindly gave me a painting of the fresh specimen in accurate colors. An interesting feature of this new acquaintance is the instant identification by means of the size, color, and tail. Often have I tried to study a *hudsonius* into an *insignis* in vain; but when *insignis* was taken, there was never a doubt, nor any need to turn to a description. I should say that *insignis* weighs 50 to 100 per cent more than *hudsonius*; the colors, similar in the museum specimens, are much more vivid, and the tail is so much heavier at the base, as to be an immediate mark of recognition.—W. E. SAUNDERS, *London, Ontario*.

AN INQUISITIVE PORCUPINE

Just at dusk on the evening of June 12, 1919, I caught sight of an adult porcupine (*Erethizon dorsatum*) coming along a road through heavy timber in the Penokee Range, 8 miles southwest of Mellen, Wisconsin. I remained standing still. He approached in his slow, deliberate way, absolutely unaware of my presence. The air was calm, there being no detectable breeze. At a distance of about 20 feet from me the animal stopped, looked up and around in different directions, and sniffed the air. He evidently was either rather suspicious or detected the odor of food. But he remained there only a second or two, then continued to within 15 feet, again stopped, looked directly at me, and sniffed for nearly 2 minutes, his nose in the air toward me all the while. Meantime I withstood scores of biting mosquitoes and remained perfectly silent. After "sizing up" the situation, so to speak, the porcupine changed his course an angle of 45 degrees and came directly toward me. I remained silent until he began gnawing my leather puttees, when I thought it time to protest, so I made a slight movement, and "porkie" scampered away and hid among the logs and brush by the roadside.—HARTLEY H. T. JACKSON, *U. S. Biological Survey, Washington, D. C.*

GRAYSQUIRRELS AND NUTS

At the National Zoological Park in Washington on January 23 last, I saw a graysquirrel burying a nut. It is commonly supposed that this instinct is active only in autumn. Can any one give observations to show that it is operative the

year round when food is sufficiently plentiful?—ERNEST THOMPSON SETON, *Greenwich, Conn.*

FORMER RANGE OF MOUNTAIN SHEEP IN NORTHERN CALIFORNIA

Recent references to the occurrence of mountain sheep in northern California appear to be restricted to Mount Shasta and the adjacent Sheep Rock, a locality only a few miles north of the great mountain. The present Sheep Rock however is very different from the Sheep Rock of the early gold-seekers. The latter, as shown by George Gibbs in his Journal and accompanying map of the McKee Expedition of 1851, was situated on the *west* side of Scott Mountains, a range to the west of Shasta Valley, which it separates from Scott Valley. The Sheep Rock of 1851 is a prominent landmark as seen from Scott Valley, and is now known both locally and on the maps of the Geological Survey as Skookum Rock. It was inhabited by Sheep in Gibbs' time—how much later we do not know.

The Shaste Indians tell me that sheep formerly occurred on Goose Nest Mountain and on Bogus Mountain north of Goose Nest Mountain, and also in the Siskiyou, but just how far west they ranged in the Siskiyou I have not been able to ascertain. In 1888 I saw in a hardware store in Portland, Oregon, a mounted ram of large size killed in the Siskiyou by the proprietor of the store.

It would be interesting to know whether the big horn of these elevated mountains—Mount Shasta, Scott Mountains, Goose Nest Mountain, Bogus Mountain, and the Siskiyou—was the same species as the one formerly inhabiting the Modok Lava Beds in the northeastern corner of California.—C. HART MERRIAM, *Washington, D. C.*

TWO MAMMALS NEW FOR OHIO

On February 2, 1921, Mr. Franklin Grothaus, a young farmer of my parish, brought me a fine ♂ of *Mustela cicognani*. For years the state of Ohio has been searched for this species, but the fact that the closest point to Ohio where it had been taken was in Pennsylvania, about 600 miles from here, and in Michigan, about 500 miles to the north, made it unlikely that it ever would be found. It is with pleasure that I record this new species for the state of Ohio. Measurements: length, 268 mm.; tail, 67 mm.; h. f., 30 mm. The specimen is now in my collection.

The other species new for Ohio, one that has been diligently looked for, as all the old records turned out to be something else, is *Microtus ochrogaster*, of which I have 3 specimens up to date, all taken by Mr. Hy. Ruess, a farmer of my parish living in Shelby County, Ohio, 2½ miles east of New Bremen. The first one, a ♀ taken February 15, 1921, measured: length, 131 mm.; tail, 21 mm.; h. f., 17.5 mm.; mammae 6, foetuses 4. The second one, taken February 22, 1921, a ♂, measured: length, 126 mm.; tail, 20 mm.; h. f., 17 mm. Four weeks of trapping did not yield any results till on April 5 another ♀ was caught, measuring 130 mm. in length; tail, 19 mm.; h. f., 17 mm.; mammae 6, foetuses 0. Thus it seems to be that the species is very rare here and probably reaches its easternmost point of distribution.—W. F. HENNINGER, *New Bremen, Ohio.*

WILD LIFE AND THE MOTOR CAR

On November 7, 1920, I motored from Austin to San Antonio, Texas, some 82 miles. On the road, evidently killed by motors travelling by night, were 4 cottontails, 2 dogs, 2 rats, 1 opossum, and 1 very large skunk. It is remarkable that the cottontail commonly suffers more than any other game animal from motor cars.—ERNEST THOMPSON SETON, *Greenwich, Conn.*

RECENT LITERATURE

Winge, Herluf. A REVIEW OF THE INTERRELATIONSHIPS OF THE CETACEA. *Smithsonian Misc. Coll.*, vol. 72, no. 8, 97 pp., 1921. [Translated by Gerrit S. Miller, Jr., from *Vidensk. Medd. fra Dansk naturh. Foren.*, Copenhagen, vol. 70, p. 59-152, 1918.]

The paper here translated is one of a series of studies by Doctor Winge on the orders of mammals. It commences with a brief statement of the supposed derivation of the group and an account of the more obvious ways in which the structure of cetaceans departs from that of land mammals as a result of a wholly aquatic existence. Following this, the major groups of the order are taken up in sequence, their chief characters are enumerated, and an attempt is made to trace a possible line of evolution for them.

The earliest known cetaceans appear in the Eocene, already equipped for living wholly in the water. They include several genera of zeuglodonts, and while some of these—*Basilosaurus* ("*Zeuglodon*")—had already reached the height of their development, there still survived at least one member of the group so primitive that the dentition is nearly unchanged from that of one of the creodonts (*Hyænodon*). This primitive genus—*Protocetus* from the Eocene of Egypt—is accepted by Winge as in the direct ancestry of the group which he calls Zeuglodontidæ, though others including its discoverer are not convinced that these are true cetaceans.

At the conclusion of the first half of the paper (p. 45) the author sums up his views. He recognizes six families of Cetacea, all of which however are not of equivalent value, namely: (1) the "*Zeuglodontidæ*" (= *Basilosauridæ*) to include these Eocene genera which he considers are unquestionably primitive cetaceans, and "must have made their appearance somewhere within the territory occupied by the hyænodonts, and probably in the oldest part of the territory." (2) The *Balænidæ*, in which he includes all whalebone whales, and believes them to be derived "from the more primitive genera" of zeuglodonts, a view at variance with that of Abel, who believes the Miocene *Patriocetus* offers a connecting link between toothed and baleen species. Gregory also suggests the comparatively recent origin of the group. (3) The *Squalodontidæ*, whose members he would have spring "from the most primitive, tooth-bearing balænidæ," a view for which it is difficult to see any satisfactory basis. Both True and Abel agree in placing the Oligocene *Agorophius* (for which Abel makes a separate family) as a near ancestor of the squalodonts. (4) The *Platanistidæ*, considered "the descendants of the primitive squalodonts." Here are included the four living genera *Steno-*